



# 2011 Iowa Rabies Summary

## ANIMAL RABIES IN IOWA:

In 2011, 25 cases of animal rabies were reported in Iowa, which is a slight decrease from 2010 (see the Table 1 below). Rabies was identified most frequently in wildlife species including 12 bats and 7 skunks. Three cases were diagnosed in cats and three cows also tested positive.

**Table 1: Positive Rabies Cases 2001-2011**

| Species      | 2001      | 2002      | 2003       | 2004       | 2005       | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | Total      |
|--------------|-----------|-----------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Bat          | 31        | 27        | 47         | 47         | 60         | 28        | 13        | 11        | 11        | 10        | 12        | <b>297</b> |
| Skunk        | 28        | 27        | 38         | 28         | 33         | 13        | 5         | 7         | 13        | 13        | 7         | <b>212</b> |
| Cat          | 10        | 7         | 8          | 11         | 5          | 7         | 7         | 9         | 3         | 1         | 3         | <b>71</b>  |
| Cow          | 10        | 12        | 3          | 10         | 7          | 4         | 0         | 1         | 5         | 1         | 3         | <b>56</b>  |
| Dog          | 2         | 3         | 6          | 3          | 2          | 2         | 5         | 1         | 2         | 1         | 0         | <b>27</b>  |
| Horse        | 3         | 2         | 3          | 0          | 1          | 3         | 1         | 0         | 0         | 0         | 0         | <b>13</b>  |
| Fox          | 1         | 0         | 0          | 1          | 0          | 0         | 0         | 0         | 0         | 1         | 0         | <b>3</b>   |
| Squirrel     | 0         | 0         | 0          | 0          | 0          | 0         | 0         | 0         | 1         | 0         | 0         | <b>1</b>   |
| Badger       | 0         | 0         | 1          | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0         | <b>1</b>   |
| <b>Total</b> | <b>85</b> | <b>78</b> | <b>106</b> | <b>100</b> | <b>108</b> | <b>57</b> | <b>31</b> | <b>29</b> | <b>35</b> | <b>27</b> | <b>25</b> | <b>681</b> |

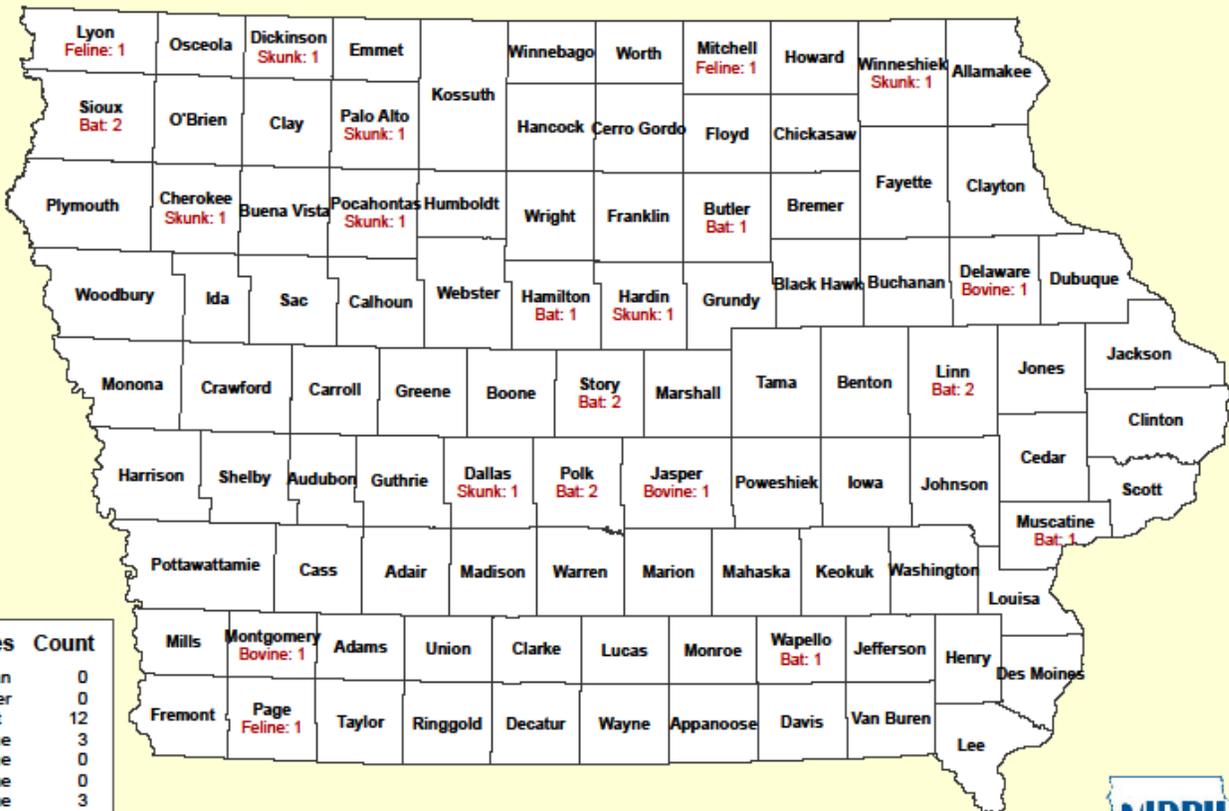
During 2011, 1493 animals in Iowa were tested for rabies and 25 were confirmed positive (1.67%). The percent positive varies greatly by species, see the Table 2 below. It is important to note that this data is greatly influenced by the number of animals tested. Many animals are tested because they exhibit unusual behavior or clinical signs making them more likely to be infected with the rabies virus. For these reasons, the percentages should not be considered representative of the true distribution of disease within the animal population in Iowa.

**Table 2: Percent Positive by Species in 2011**

| Species | Positive | Total Tested | % Positive |
|---------|----------|--------------|------------|
| Cow     | 3        | 67           | 4.48%      |
| Cat     | 3        | 369          | 0.81%      |
| Bat     | 12       | 506          | 2.37%      |
| Skunk   | 7        | 22           | 31.82%     |

There are two rabies strains that commonly circulate in Iowa (bat and skunk), and many different species can be infected with these strains. In animal samples that are strongly positive for rabies (the strain typing procedure is only effective in samples that are strongly positive as opposed to weakly positive), the State Hygienic Laboratory (SHL) can differentiate the rabies strain that infected the animal. In 2011, SHL was able to identify the rabies strain in 22 of the 25 positive rabies cases, 11 were skunk strain and 11 were bat strain. Skunk strain rabies was identified in 7 skunks, 3 cows, and 1 cat. Bat strain rabies was identified in 10 bats and 1 cat.

# 2011 Iowa Rabies Map



Source: Iowa Department of Public Health, Center for Acute Disease Epidemiology



Updated: 1/26/2012

There are two laboratories that test animals for rabies in Iowa:

- State Hygienic Laboratory at the University of Iowa
  - Iowa State University Veterinary Diagnostic Laboratory
- Iowa animals are also periodically tested in out-of-state laboratories

## HUMAN RABIES IN IOWA:

Iowa's most recent human rabies case occurred in 2002. The illness was caused by the bat strain. Prior to that, the last reported case occurred in 1951.

While the exact number of people who receive rabies post exposure prophylaxis each year in the United States is unknown, it is estimated to be about 40,000 people. Based upon Iowa's population, that would equate to approximately 390 Iowan's receiving preventative treatment each year.